

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A device for producing laser radiation having a wavelength of about 2 μ m, the device comprising:

a Tm:YAG sample; and

a source of pumping radiation having a wavelength of about 1 μ m, the source of pumping radiation comprising a resonant cavity composed of a Nd:YAG sample and that includes a first pair of members that are substantially reflective to radiation having a wavelength of about 1 μ m, and a the pumped Nd:YAG sample being substantially interposed between the first pair of members,

the resonant cavity also having the Tm:YAG sample located substantially therein between the first pair of members, and the source being arranged so that at least some of the radiation produced by the source thereby is absorbed by the Tm:YAG sample, causing the Tm:YAG sample to emit radiation having a wavelength of about 2 μ m.

2. (canceled)

3. (canceled)

4. (canceled)

5. (previously presented) A device according to Claim 1, comprising a source of pumping radiation for the Nd:YAG sample to stimulate the Nd:YAG sample to emit radiation having a wavelength of about 1 μ m.

6. (original) A device according to Claim 5, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of arrays of laser diodes.

7. (original) A device according to Claim 5, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of flashlamps.

8. (currently amended) A device according to Claim 1, wherein the Tm:YAG sample is substantially interposed between a second pair of members, at least one of which is substantially reflective to radiation having a wavelength of about 2 μ m.

9. (currently amended) A device according to Claim 8, wherein the second pair of members is located substantially within the resonant cavity.

10. (original) A device according to Claim 1, wherein the device produces laser radiation having a wavelength of substantially 2.02 μ m.

11. (original) A device according to Claim 1, wherein the source of radiation having a wavelength of about 1 μ m is a source of radiation having a wavelength of substantially 1.064 μ m.

12. (currently amended) A method of producing laser radiation having a wavelength of about 2 μ m, the method comprising the steps of:

providing a Tm:YAG sample;

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providing a resonant cavity that includes, the resonant cavity being composed of a Nd:YAG sample and a first pair of members that are substantially reflective to radiation having a wavelength of about 1 μ m, and a the Nd:YAG sample being substantially interposed between the first pair of members;

locating the Tm:YAG sample substantially within the resonant cavity between the first pair of members; and

pumping the Nd:YAG sample for emitting pumping radiation having a wavelength of about 1 μ m within the resonant cavity so that at least some of the radiation having a wavelength of about 1 μ m is absorbed by the Tm:YAG sample, causing the Tm:YAG sample to emit radiation having a wavelength of about 2 μ m.

~~13. (canceled)~~

~~14. (canceled)~~

~~15. (canceled)~~

16. (previously presented) A method according to Claim 12, comprising the steps of:

providing a source of pumping radiation for the Nd:YAG sample; and

stimulating the Nd:YAG sample with the pumping radiation to cause the Nd:YAG sample to emit radiation having a wavelength of about 1 μ m.

17. (original) A method according to Claim 16, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of arrays of laser diodes.

18. (original) A method according to Claim 16, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of flashlamps.

19. (currently amended) A method according to Claim 12, further comprising the steps of: providing a second pair of members, at least one of which is substantially reflective to radiation having a wavelength of about $2\mu\text{m}$; and interposing the Tm:YAG sample substantially between the second pair of members.

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20. (currently amended) A method according to Claim 19, further comprising the step of locating the second pair of members substantially within the resonant cavity.

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21. (original) A method according to Claim 12, wherein the method produces laser radiation having wavelength of substantially 2.02 μm .

22. (currently amended) A method according to Claim 12, wherein the step of emitting pumping radiation having a wavelength of about $1\mu\text{m}$ comprises the step of emitting pumping radiation having a wavelength of substantially 1.064 μm .
